

OPPORTUNITIES FOR EARTHSCOPE EDUCATION AND OUTREACH

EarthScope Education and Outreach Subcommittee (EEOC)

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EarthScope's Education and Outreach (E&O) program aims to create a high-profile public identity for EarthScope and promote Earth science literacy among all audiences. EarthScope is distinct among major geoscience programs in two ways. First, planning for education and public engagement occurred in tandem with planning for the science mission. Second, the NSF EarthScope program includes funding support for education and outreach. E&O is carried out by the EarthScope National Office (ESNO), IRIS, UNAVCO, the EarthScope Education and Outreach Subcommittee (EEOC), and PI-driven EarthScope projects. In this poster, we identify key opportunities for E&O that both build on the program's successes and take into account new trends and technologies.

The portfolio of programs and activities EarthScope has supported is diverse. EarthScope delivers science education through informal and formal education activities and by making available a variety of online educational resources. Funded E&O programs such as TOTLE, Illinois EarthScope, CEETEP, and GETSI foster use of freely available EarthScope data and research findings. The program can strengthen ties to diverse audiences through ongoing participation in and collaboration with organizations, alliances and networks that represent diverse groups. In the realm of formal education, the Next Generation Science Standards (NGSS) and demand for undergraduate curriculum also create opportunities to promote geoscience education research and evaluation, which are necessary to demonstrate the effectiveness and impact of E&O efforts. New discoveries, cybertechnology, and engineering advances propel the science forward and create new ways to connect with the public and students. The rapidly growing use of mobile smart devices by the public and in formal classrooms requires the development of innovative apps to share useful content that excites users to learn more about EarthScope. In addition, EarthScope E&O can refine its successful use of social media to deliver EarthScope information to targeted journalists, bloggers, and specific media outlets.

EarthScope's E&O program is based on a set of objectives found in the EarthScope Education and Outreach Implementation Plan. Guided by this plan, EEOC helps focus EarthScope E&O and periodically updates the plan to ensure it remains true to the program's mission and addresses the nation's needs. Therefore, we invite input on EarthScope E&O from the EarthScope science community. In particular, we are interested in knowing (1) which E&O issues are of highest interest; and (2) how EarthScope E&O can help geoscientists with the broader impacts of proposed and current projects, and with their individual E&O activities.



Figure 1: A Michigan Tech geoscience graduate student demonstrates how rock samples are collected for paleomagnetic analysis to participants at the Summer 2014 EarthScope Mid-continent Rift Educators Program Workshop. Photo credit: Kathy Ellins.